

Title (en)

Flexible lighting device including a protective conformal coating

Title (de)

Flexible Beleuchtungsvorrichtung mit einer schützenden Schutzbeschichtung

Title (fr)

Dispositif d'éclairage flexible comprenant un revêtement enrobant de protection

Publication

EP 2779814 A3 20141001 (EN)

Application

EP 14159188 A 20140312

Priority

- US 201313837403 A 20130315
- US 201313948512 A 20130723

Abstract (en)

[origin: EP2779814A2] A lighting element is provided, comprising: a flexible substrate (510, 530, 110); first conductive element (130) and second conductive element (140) located on the flexible substrate (510, 530, 110); a light-emitting element (210) having a first contact (230) and a second contact (240) that are both on a first surface of the light-emitting element (210), the light-emitting element (210) emitting light from a second surface opposite the first surface; a first conductive connector (235) located between the first conductive element (130) and the first contact (230), electrically connecting the first conductive element (130) to the first contact (230); a second conductive connector (245) located between the second conductive element (140) and the second contact (240), electrically connecting the second conductive element (140) to the second contact (240); a first protective conformal coating (1565, 1675) located adjacent to the second surface; and an affixing layer (540) located between the flexible substrate (510, 530, 110) and the first protective conformal coating (1565, 1675), the affixing layer (540) affixing the first protective conformal coating (1565, 1675) to the flexible substrate (510, 530, 110), wherein the first protective conformal coating (1565, 1675) is substantially transparent to light.

IPC 8 full level

H05K 3/28 (2006.01); **F21V 17/00** (2006.01); **H05K 1/18** (2006.01)

CPC (source: CN EP US)

F21S 4/22 (2016.01 - CN EP US); **H01L 33/56** (2013.01 - US); **H01L 33/64** (2013.01 - US); **H05K 3/284** (2013.01 - CN EP US); **F21Y 2101/00** (2013.01 - CN); **F21Y 2103/10** (2016.07 - CN EP US); **F21Y 2115/10** (2016.07 - CN EP US); **H01L 25/0753** (2013.01 - EP US); **H01L 33/64** (2013.01 - EP US); **H01L 2924/0002** (2013.01 - CN EP US); **H05K 1/189** (2013.01 - CN EP US); **H05K 2201/09872** (2013.01 - CN EP US); **H05K 2201/10106** (2013.01 - CN EP US); **H05K 2201/10977** (2013.01 - CN EP US)

C-Set (source: CN EP US)

H01L 2924/0002 + H01L 2924/00

Citation (search report)

- [XYI] US 2004223328 A1 20041111 - LEE KIAN SHIN [MY], et al
- [YA] EP 2381157 A2 20111026 - TOSHIBA LIGHTING & TECHNOLOGY [JP]
- [A] DE 202010017532 U1 20120119 - EPPSTEINFOILS GMBH & CO KG [DE]

Cited by

US11670900B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2779814 A2 20140917; **EP 2779814 A3 20141001**; CA 2843984 A1 20140915; CA 2843984 C 20181204; CN 104051594 A 20140917; CN 104051594 B 20180824; US 2014264423 A1 20140918

DOCDB simple family (application)

EP 14159188 A 20140312; CA 2843984 A 20140225; CN 201410095534 A 20140314; US 201313948512 A 20130723